Sample Questions for the *Stanford Achievement Test*, Ninth Edition Stanford 9

Sample test questions include:

- Grade 3:
  Mathematics: Problem Solving subtest
  Language (Written Expression) subtest
  Text source: *Stanford Achievement Test*, Ninth Edition—Guide for Classroom Planning, Primary 3

- Grades 7 and 8:
  Reading Comprehension subtest
  Mathematics: Problem Solving subtest
  Text source: *Stanford Achievement Test*, Ninth Edition—Guide for Classroom Planning, Advanced 1/2 levels

- Grades 9, 10, and 11:
  Science subtest
  Social Science subtest
  Reading Comprehension subtest
  Text source: *Stanford Achievement Test*, Ninth Edition—Guide for Classroom Planning, TASK 1/2/3 levels

Stanford 9 – Mathematics: Problem Solving Subtest
Primary 3 (Grade 3)

Content Cluster: Problem Solving Strategies
Process Cluster: Mathematics as Problem Solving

An important component in solving problems involving computation is identifying the relevant elements. This item asks students to identify missing information, but does not ask them to calculate a result. This permits teachers to distinguish between students who are having communication difficulties with problems and students who are having computational difficulties with problems.

Herb bought a candy bar for $0.75 and a package of gum for $0.50. What else do you need to know to find out how much change Herb should receive?

Ⓕ How many sticks of gum were in the package.

Ⓖ Where he bought the candy and gum.

Ⓗ The size of the candy bar.

Ⓙ How much money he gave the clerk.*

Stanford 9 – Language (Written Expression) Subtest
Primary 3 (Grade 3)

Content Cluster: Expression
Subcluster: Sentence Structure
Process Cluster: Composing

Good writers are able to communicate their ideas by using properly constructed sentences. Sentence fragments and run-ons are problematic for many young writers.

Sara walked into the kitchen, she looked for a snack.

Ⓕ Sara walked into the kitchen. And looked for a snack.

Ⓖ Sara walking into the kitchen and looking for a snack.

Ⓗ Sara walked into the kitchen and looked for a snack.*

Ⓙ Correct as is

Reading Comprehension

Emily's Memory Quilts

by
Clifford E. Trafzer

Emily Yellow Wolf was the oldest known Native American in the state. My editor had heard of this old woman from his wife, who met Emily briefly at an exhibition of her quilts at the Byrd Museum. As a result, my editor decided that I should write a feature story about her life for the Seattle *World Times*. I admit that at first I was not interested in the story of an elderly and obscure Native American woman. I know nothing about Native American people and was not inclined to learn about the quilts just to write a newspaper article. All this changed after I met Emily Yellow Wolf, an unforgettable character.

Emily lived in the university district of the city, and I visited her at her home on 45th Street. She answered the door with a warm smile, her small, strong stature making her look amazingly younger than her actual years. Without an introduction, she invited me into her living room. I found a spot to sit on her couch, which was covered with small scraps of colorful cloth. The elderly lady laughed as we sat down.

"All of these memories," Emily said with a chuckle, "all of these memories."

I took out my pencil and paper and briefly explained the purpose of my visit. Emily flashed a grin, as if she wondered what she could say that would be of interest to me.

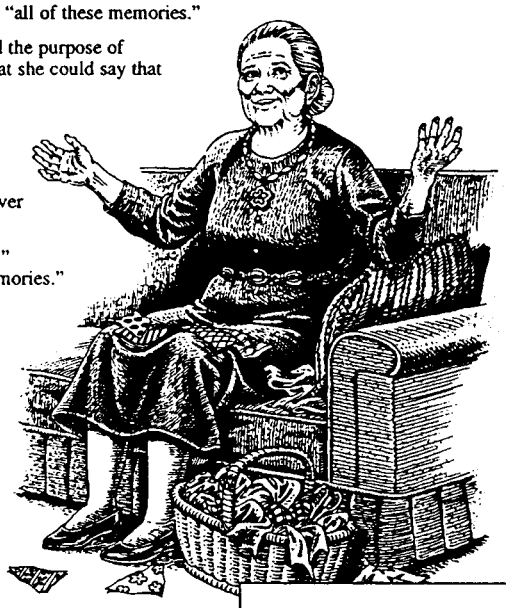
"Tell me about yourself," I said. "Tell me where you were born and how you learned to make such beautiful quilts."

Emily gave me a serious look, running her fingers over her gray hair.

"I've been living here in Seattle for a long time now," Emily responded. "I live here alone with all these memories."

Emily moved her arms out from her body in a wide, sweeping motion. I asked her what she meant by "all these memories" and waited for her answer. Emily sat quietly looking at the scraps of cloth scattered around us.

"That red bandanna cloth you see over there," Emily said, pointing to her sewing machine, "well, that is the last of the blouse I was wearing when my girl Hayley was born. That square is more than a piece of cotton, you see. It is memory, too. I put those memories into each quilt I make."



Emily claimed that her success as a quilter was the result of incorporating her personal memories into each work of art. That was more important to her than what other people thought of her quilts. My interview with this remarkable Native American elder sparked my interest in learning more about the ways of Native American people and their interest in preserving what is important in their past.

Clifford E. Trafzer, a Wyandot Indian, has written many books about the histories and cultures of Native Americans. He is a college professor and has been involved in numerous American Indian and tribal projects.

7 **What do Emily Yellow Wolf's quilts symbolize to her?**
- * **A** Her life
- **B** Her home
- **C** Her friends
- **D** Her goals

8 **The theme of the story has to do with —**
- **F** the qualities of friendship
- **G** the importance of honesty
- **H** taking care of older people
- * **J** remembering the past

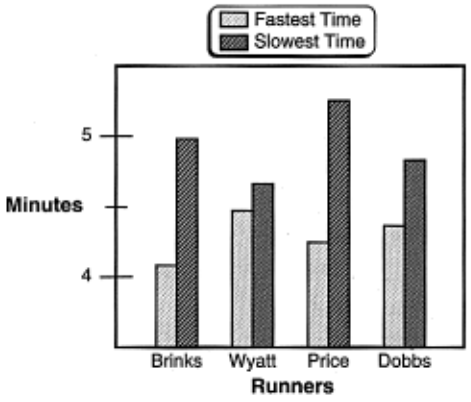
9 **This story is most like —**
- **A** a legend
- **B** historical fiction
- **C** a first-hand narrative
- * **D** a newspaper article

10 **Which words in the story show that the interviewer had changed his attitude?**
- **F** "I should write a feature story ..."
- **G** "... the result of incorporating her personal memories ..."
- * **H** "... sparked my interest in learning more ..."
- **J** "I found a spot to sit on her couch ..."

Content Cluster: Statistics
Process Cluster: Mathematical Connections

Understanding alternative representations of data is an important mathematical skill. The graph deals with limits, a crucial concept in secondary and post-secondary mathematics. This item assesses whether the student can recognize that the concept of limits is implied by data represented in this form.

Four runners have competed against each other in the 1500-meter race many times. This graph shows each runner's fastest and slowest time.



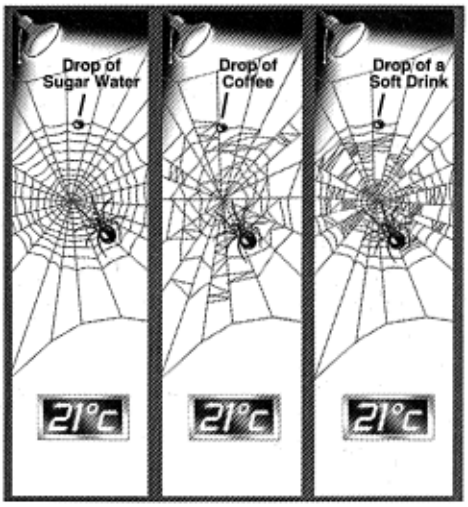
One of the runners had a time of 4 minutes 12 seconds for one of the races. Based on the data in the graph, it was probably —

A Brinks*
B Wyatt
C Price
D Dobbs

Stanford 9 - Science Subtest
TASK 1/2/3 (Grades 9, 10, 11)

Content Cluster: Life Science
Process Cluster: Recognizing Constancy and Patterns of Change

Applying an understanding of patterns is an important skill in all of the sciences. In the biological sciences, this applies to simple observations, as in this item, or to complex experiments. This skill helps us to answer questions about the natural world.



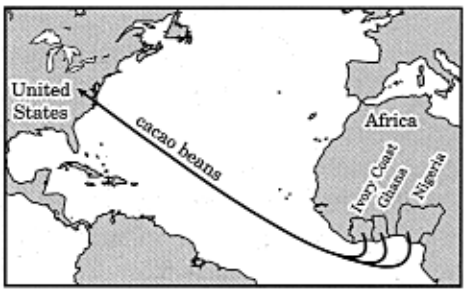
Which question can be answered by the results of this experiment?

A Why do some spiders build webs?
B At what temperatures will spiders build the most uniform web?
C What are the effects of different compounds on web building?*
D How does light affect spider webs?

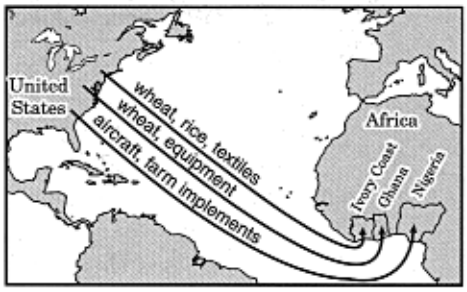
Content Cluster: Economics
Process Cluster: Organizing and Using Information

International financial dealings are part of the fundamental economic concept of "Absolute and Comparative Advantages and Barriers to Trade." The use of a geographic stimulus allows students to process the information visually. The use of maps is not restricted to geography items in the Stanford series.

United States Imports from Southwest Africa



United States Exports to Southwest Africa



These maps provide an example of—

F economic interdependence*
G self-containing economies
H mixed economies
J corporate economy

Stanford 9 – Reading Comprehension Subtest
TASK 1/2/3 (Grade 9, 10, 11)

Content Cluster: Textual

Nonfiction literature is appropriate for students when it helps them make connections between what they are learning in school and the world around them. This textual selection by Suki Casanave emphasizes one man's enthusiasm for his career in science.

Spider Man
by Suki Casanave

Most people shriek when they see a spider. Ed Tillinghast smiles with delight. He usually scoops up the eight-legged critter and takes it back to his lab for studying. In fact, nothing makes Tillinghast happier than to be standing knee-high in a swamp somewhere in South Carolina or Florida, catching spiders.

"I just love them," says Tillinghast, a professor of biology and arachnid specialist at the University of New Hampshire, who finds all sorts of things about spiders fascinating. "The more you learn about them, the more questions you have."

Like an admiring fellow architect, he explains how a spider constructs its web. Unlike silk worms, which produce only one type of silk, spiders produce many. The construction process begins, he says, with a pattern of radial fibers, the spokes that extend from the middle of the web. The spider spins these strands from the same fiber it uses to produce its "drag line," the thread that keeps it attached to its web.

Next, the spider lays down a loose temporary spiral, working its way from the center of the spokes to the outside edges. "Sort of like the scaffolding used to construct a building," Tillinghast says. Once the spider reaches the outside edges of the web, it heads back to the center, eating the scaffolding as it goes and building in its place a much tighter spiral made with a sticky thread. It is the strands of this "real web," the one designed to catch insects for the spider to eat, that especially intrigue Professor Tillinghast.

"Everyone else studies the non-sticky threads," he says. "I want to know what makes the web sticky." The sticky threads are spun from two special glands and coated with a sugary substance, called glycoprotein, that clings to the thread in small globules. "It's not intended to be like a super glue," says the Professor. "It's just strong enough to restrain an insect."

Tillinghast has discovered from his research that nature has a lot to teach us. "It's becoming increasingly evident," he says, "that nature has designed things in a superior way. Why not look closely at nature to figure out how something's been done?" The spider, in fact, is a perfect example of nature's message for mankind—a creature who consumes its own web and then recycles it without leaving a residue. "In nature, the most sophisticated things are done in a very gentle way, without hurting the environment," says Tillinghast. "If there is to be a human future, we too will have to act with efficiency and gentleness."

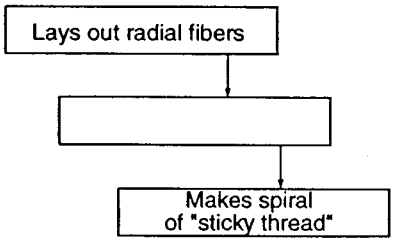
Process Cluster: Initial Understanding
Objective: Action/Reason/Sequence

According to the author, spiders set a good example for humans because they —

F get along well in groups
G do not hurt the environment*
H work very hard
J make a product that can be used many times

Process Cluster: Strategies

The boxes show some important ideas from the article.



Which of these belongs in the empty box?

A Spins temporary spiral*
B Catches insects in the web
C Tightens the radial fibers
D Coats the web with a sugary substance